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METHODS AND APPARATUS FOR MANAGING A FLOW OF PACKETS USING CHANGE AND REPLY SIGNALS

ABSTRACT OF THE DISCLOSURE

Techniques are provided for controlling a flow of packets in a data communications device. A first technique involves transferring packets of a particular packet flow based on an initial policy scheme, and planning a scheme change to change the initial policy scheme to a new policy scheme based on conditions within the data communications device existing while transferring the packets of the particular flow based on the initial policy scheme. The first technique further involves providing a change signal to the source of a particular packet flow (e.g., a sending host). The change signal indicates that the data communications device has planned the scheme change. Additionally, the first technique involves processing the scheme change based on either a reply signal from the source or an absence of a reply signal from the source.

Another technique involves outputting packets of a particular packet flow to a data communications device that transfers the packets of the particular packet flow based on an initial policy scheme. Additionally, the technique involves receiving, in response to the outputted packets of the particular packet flow, a change signal from the data communications device. The change signal indicates that the data communications device has planned a scheme change to change the initial policy scheme to a new policy scheme. Furthermore, the technique involves providing, to the data communications device, a reply signal that provides direction for processing the scheme change.